

Amendments to the CLAIMS

1. (Currently Amended) A paper quality improver for internal addition, which comprises a polymer emulsion comprising a natural cationic polymer (A) and polymer particles (B) comprising at least vinyl monomer-derived structural ~~units.~~ units, said monomer units comprising 94.66 wt. % to 100 wt. % of at least one vinyl monomer-derived structural unit derived from a monomer selected from the group consisting of an alkyl acrylate, an alkyl methacrylate, vinyl fatty esters, styrene and α -methyl styrene.

2. (Original) The paper quality improver for internal addition according to claim 1, wherein the natural cationic polymer (A) is at least one selected from cationic starch and cationic cellulose.

3. (Original) The paper quality improver for internal addition according to claim 1, wherein the glass transition temperature (TG) of the polymer particle (B) comprising vinyl monomer-derived structural units is 90°C or less.

4. (Previously Presented) The paper quality improver for internal addition according to claim 1, wherein the vinyl monomer is a vinyl fatty ester.

5. (Previously Presented) The paper improver for internal addition according to claim 1, wherein the nitrogen content of the natural cationic polymer (A) is 0.05 to 1 wt %.

6. (Original) The paper quality improver for internal addition according to claim 1, wherein the proportion of the natural cationic polymer (A) is 5 to 500 parts by weight relative to 100 parts by weight of the polymer particles (B).

7. (Original) A pulp sheet comprising the paper quality improver for internal addition according to claim 1 on the surface and/or in the inside of the pulp sheet.

8. (Original) The pulp sheet according to claim 7, which is obtained by adding the paper quality improver for internal addition in an amount of 0.05 to 20 parts by weight in terms of solid content to 100 parts by weight of a pulp sheet.

9. (Currently Amended) A paper quality improver for internal addition, which comprises a polymer emulsion comprising a synthetic cationic polymer (A') having a viscosity of 20 mPa·s (50°C) or more ~~in the form of an~~ in a 7 wt. % aqueous solution (7 wt %), as determined at 50°C with a Brookfield viscometer and Rotor No. 2 at 60 rpm, and a nitrogen content of 1.0 ~~wt. wt. %~~ or less and polymer particles (B) having a glass transition temperature (TG) of 90°C or less having vinyl monomer-derived structural ~~units.~~ units, said monomer units comprising 94.66 wt. % to 100 wt. % of at least one vinyl monomer-derived structural unit derived from a monomer selected from the group consisting of an alkyl acrylate, an alkyl methacrylate, vinyl fatty esters, styrene and α -methyl styrene.

10. (Previously Presented) A method of improving paper qualities of a pulp sheet, which comprises bringing the paper quality improver for internal addition according to claim 1 into contact with pulp.

11. (Previously Presented) A method of improving paper qualities of a pulp sheet, which comprises adding the paper quality improver for internal addition according to claim 1 to pulp slurry at the time of papermaking.

12. (Cancelled)

13. (New) The paper quality improver according to claim 1, in which the vinyl monomer-derived structural unit comprises 2.43 wt. % or less of a polymerizable unsaturated group – containing anionic monomer.

14. (New) The paper quality improver according to claim 1, in which the vinyl monomer-derived structural unit comprises 2.78 wt. % or less of a nonionic hydrophilic group – containing monomer.

15. (New) The paper quality improver according to claim 1, in which the polymer emulsion includes polymer particles (B) having an average size of 0.1 to 30 μ m.

16. (New) The paper quality improver according to claim 1, in which the polymer particles (B) are obtained by emulsion polymerization method, suspension polymerization method or dispersion polymerization method.

17. (New) The paper quality improver according to claim 1, in which the polymer particles (B) are obtained by emulsion polymerization method, suspension polymerization method or dispersion polymerization method in the presence of a natural cationic polymer (A).

18. (New) The paper quality improver of claim 1, wherein the emulsion contains particles (B) in an amount of 5 to 60 wt.%.

19. (New) The paper quality improver of claim 1, wherein the average diameter of the polymer particle (B) is 0.01 to 50 μ m.

20. (New) The paper quality improver of claim 9, wherein the synthetic cationic polymer (A') is present in an amount of 5 to 500 parts by weight based on 100 parts by weight of polymer particles (B).